Information Services Industry Trends

MS-2 INPUT

- Introduction
- Information Systems Trends
- "OutSourcing"
- Information Services Markets
- Competition
- Conclusion

MS-13 INPUT

Information Systems

I-1 INPUT

Fundamental Driving Forces

Key Business Trends:

- Shorter product life cycles
- More customization/specialization
- Narrower market segments
- Higher impact of technology
- More competition from overseas vendors

I-2 INPUT

Fundamental Driving Forces

- *Apply to the information systems and services industry*
- *Are restructuring the role of IS management*
  - -Reactive to proactive
  - -Technology-driven to user-driven
  - -Centralized to "federated"

I-3 INPUT

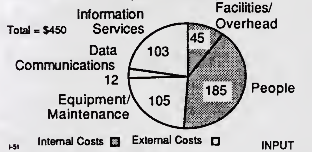
Blocking Factors

- Infrastructure gridlock
- Lack of qualified in-house personnel
- Existing applications portfolio
- Organizational response time

Create opportunities for the information services industry

I-4 INPUT

Domestic User Expenditures, 1990 ($ Billions)

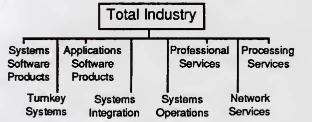


I-51 INPUT

Information Services Industry Trends

IS-1 INPUT

Information Services Industry Structure



IS-2 INPUT

Information Services Market

- Major Trends
  - Slow rebound from U.S. recession, 1991-1992
  - Information services growth rate—12% to 15% per year

IS-3a INPUT

Information Services Market

- Major Trends
  - Sheer market size causes lower growth rates
  - International markets grow more rapidly

IS-3b INPUT

Information Services Market

- Major Trends
  - Growing acceptance of standards, open systems
  - Systems complexity fuels need for vendor expertise

IS-4a INPUT

Information Services Market

- Major Trends
  - Introduction of new technology drives market growth, but user "absorption" capability limits growth

IS-4b INPUT

Information Services Market

- Major trends
  - Shift to client/server gaining momentum
  - Outsourcing acceptance increasing

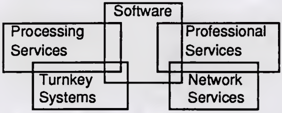
IS-4c INPUT

Products and Services Markets Blurring

- Traditional competitors are changing:
  - Traditional product companies adding services
  - Traditional service companies adding products

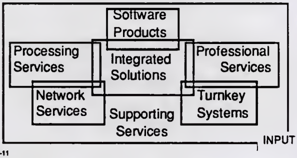
IS-7a INPUT

IS Market Structure—1980s
INPUT's View



IS-10 INPUT

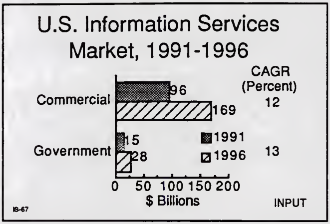
Information Services Market Structure—1990s
Emphasis on Supporting Services

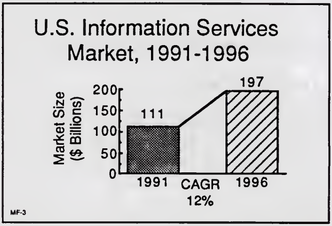


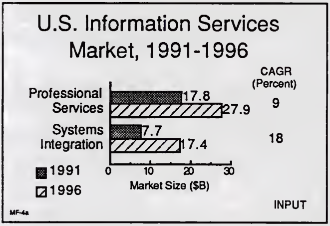
IS-11 INPUT

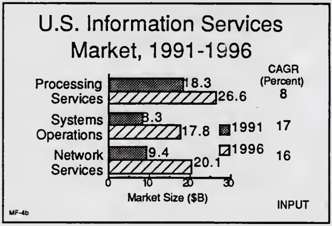
U.S. Information Services Market Outlook

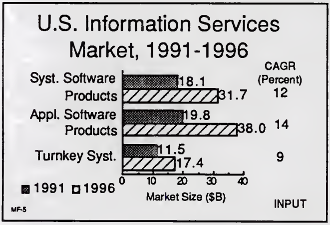
IS-66 INPUT











U.S. Information Services Market—Vertical Sectors

Largest	Fastest Growing
Banking and Fin.	State and Local Gov't.
Discrete Mfg.	Telecommunications
Federal Gov't.	Discrete Mfg.
Process Mfg.	Retail Distribution

IS-68 INPUT

Vendor Initiatives

Vendor	Direction
Microsoft	Prof. services
Computer Associates	More acquisitions
Technology Solutions	Solutions approach to prof. services

IS-69a INPUT

Vendor Initiatives

Vendor	Direction
IBM/DEC	Profitability measurement for sales
NCR	Broaden prof. services
UNISYS	Commercial prof. services

IS-69b INPUT

Vendor Activities Demonstrate 1990s Trends

- Andersen Consulting
- Computer Associates
- Computer Sciences
- Electronic Data Systems

CO-2 INPUT

Andersen Consulting Services Evolution

- Management Consulting
- Professional Services
  - Software Products
    - Systems Integration
      - Systems Management
        - Systems Operations

CO-4 INPUT

Computer Associates

- Largest software product vendor
- Consolidation in systems software products
- Strategy—growth by acquisition
- Developing architecture
- Porting products to DEC and others
- Establishing alliances
- Emphasize continuing revenue streams

CO-5 INPUT

Computer Sciences Corp

- Continues strong in federal markets
  - -Primarily professional services/SI
- Resurgent interest in commercial markets
  - -Health and insurance
  - -Tax and credit
  - -Professional services/SI

CO-8 INPUT

Digital Equipment

- Equipment
  - Software Products
    - Professional Services
      - Systems Integration
      - Enterprise Services
        - Network Services

CO-11 INPUT

EDS

- Industry leader in systems operations
- Aiming for very large accounts
- Industry-oriented
  - Finance
  - Insurance
  - State and local government
  - Banking

CO-12 INPUT

EDS

- Systems Operations
  - Systems Integration
    - Processing Services
      - Network Mgmt.
        - Business Operations

CO-14a INPUT

Opportunities and Conclusions

IS-70 INPUT

New Technology Foundations

- International standards
- Graphical user interface
- Client-server
- Networking and integration

IS-63a INPUT

New Technology Foundations

- Distributed data
- Imaging
- Engineered/re-engineered software

IS-63b INPUT

The Changing Buyer

- General manager becomes primary buyer
- IS becomes internal consultant
- Solutions versus technology

IS-64a INPUT

The Changing Buyer

- Decisions become larger—take longer
- The budget is decentralized—multiple buyers

IS-64b INPUT

Single Message

Solutions focus on:
what it does
NOT
how it does it

IS-73 INPUT

About INPUT

INPUT provides planning information, analysis, and recommendations for the information technology industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions.

Subscription services, proprietary research/consulting, merger/acquisition assistance, and multiclient studies are provided to users and vendors of information systems and services. INPUT specializes in the software and services industry which includes software products, systems operations, processing services, network services, systems integration, professional services, turnkey systems, and customer services. Particular areas of expertise include CASE analysis, information systems planning, and outsourcing.

Many of INPUT's professional staff members have more than 20 years' experience in their areas of specialization. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

Formed as a privately held corporation in 1974, INPUT has become a leading international research and consulting firm. Clients include more than 100 of the world's largest and most technically advanced companies.

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Information Services Industry Trends

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MS-2

Notes

- Introduction
- Information Systems Trends
- "Outsourcing"
- Information Services Markets
- Competition
- Conclusion

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MS-13

Notes

Information Systems

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I- 1

Notes

Fundamental Driving Forces

Key Business Trends:

- Shorter product life cycles
- More customization/specialization
- Narrower market segments
- Higher impact of technology
- More competition from overseas vendors

INPUT

I- 2

Notes

Fundamental Driving Forces

- *Apply to the information systems and services industry*
- *Are restructuring the role of IS management*
  - Reactive to proactive
  - Technology-driven to user-driven
  - Centralized to "federated"

INPUT

I- 3

Notes

Blocking Factors

- Infrastructure gridlock
- Lack of qualified in-house personnel
- Existing applications portfolio
- Organizational response time

Create opportunities for the information services industry

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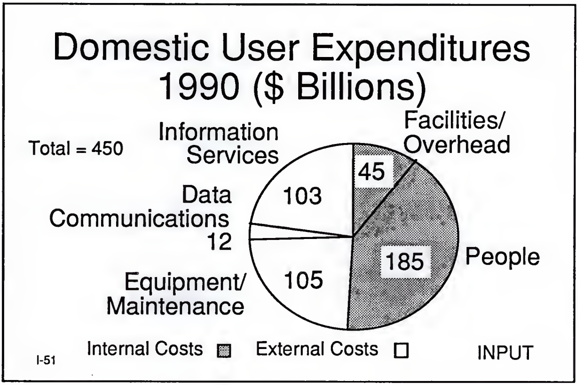
I- 4

Notes



Domestic User Expenditures
1990 ($ Billions)
Total = 450
Information Services
103
Facilities/ Overhead
45
Data Communications
12
People
185
Equipment/ Maintenance
105
Internal Costs
External Costs
I-51
INPUT

Notes

1/14/91

Information Services Industry Trends

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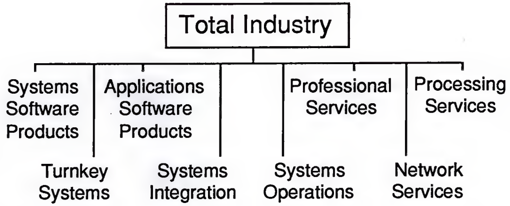
MPRE-34

Notes

Information Services Industry Structure



IS-2

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Notes

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Information Services Market

- Major Trends
  - Slow rebound from U.S. recession, 1991-1992
  - Information services growth rate—12% to 15% per year

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IS-3a

Notes

7/29/91

Information Services Market

- Major Trends
  - Sheer market size causes lower growth rates
  - International markets grow more rapidly

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IS-3b

Notes

Information Services Market

- Major Trends
  - Growing acceptance of standards, open systems
  - Systems complexity fuels need for vendor expertise

IS-4a

INPUT

Notes

Information Services Market

- Major Trends
  - Introduction of new technology drives market growth, but user "absorption" capability limits growth

IS-4b

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Notes

5/21/91

Information Services Market

- Major trends
  - Shift to client/server gaining momentum
  - Outsourcing acceptance increasing

IS-4c

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Notes

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Products and Services Markets Blurring

- Traditional competitors are changing:
  - Traditional *product* companies adding services
  - Traditional *service* companies adding products

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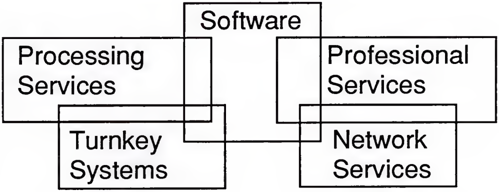
IS-7a

Notes

7/29/91

IS Market Structure—1980s
INPUT's View



IS-10

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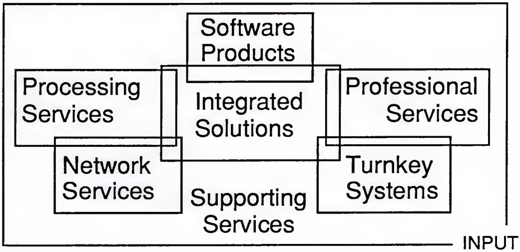
Notes

7/29/91

Information Services Market Structure—1990s

Emphasis on Supporting Services



IS-11

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U.S. Information Services Market Outlook

IS-66

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Notes

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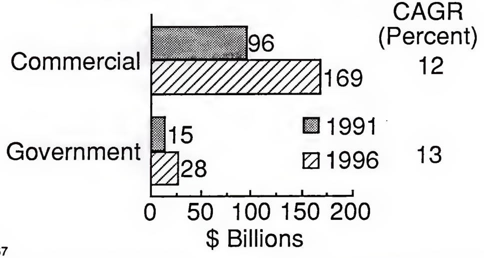
U.S. Information Services Market, 1991-1996



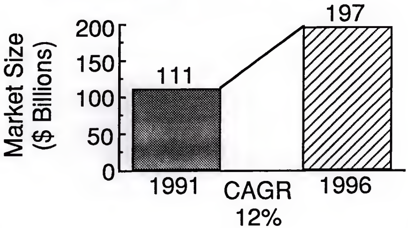
IS-67

Notes

9/28/91

MF-3

U.S. Information Services Market, 1991-1996



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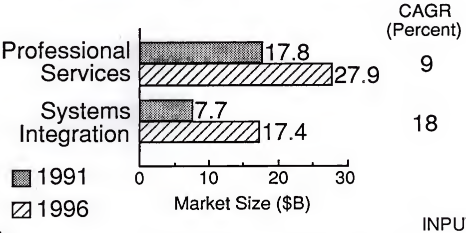
Notes

10/29/91

U.S. Information Services Market, 1991-1996



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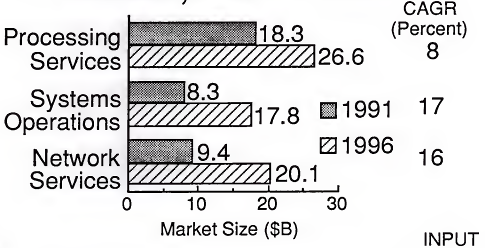
MF-4a

Notes

1/30/92

U.S. Information Services Market, 1991-1996



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MF-4b

Notes

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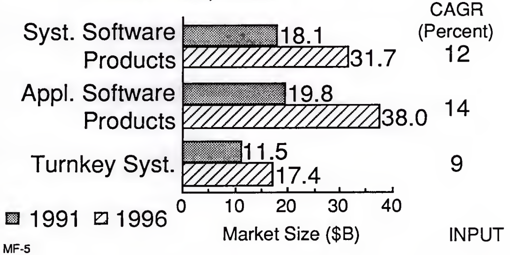
U.S. Information Services Market, 1991-1996



MF-5

Notes

1/30/92

U.S. Information Services Market—Vertical Sectors

Largest	Fastest Growing
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Discrete Mfg.	Telecommunications
Federal Gov't.	Discrete Mfg.
Process Mfg.	Retail Distribution

IS-68

INPUT

Notes

9/28/91

Vendor Initiatives

Vendor	Direction
Microsoft	Prof. services
Computer Associates	More acquisitions
Technology Solutions	Solutions approach to prof. services

IS-69a

INPUT

Notes

9/28/91

Vendor Initiatives

Vendor	Direction
IBM/DEC	Profitability measurement for sales
NCR	Broaden prof. services
UNISYS	Commercial prof. services

IS-69b

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Notes

9/28/91

Vendor Activities Demonstrate 1990s Trends

- Andersen Consulting
- Computer Associates
- Computer Sciences
- Electronic Data Systems

INPUT

CO-2

Notes

1/30/92

Andersen Consulting Services Evolution

- Management Consulting
- Professional Services
  - Software Products
    - Systems Integration
      - Systems Management
        - Systems Operations

CO-4

INPUT

Notes

1/30/92

Computer Associates

- Largest software product vendor
- Consolidation in systems software products
- Strategy—growth by acquisition
- Developing architecture
- Porting products to DEC and others
- Establishing alliances
- Emphasize continuing revenue streams

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CO-5

Notes

1/30/92

Computer Sciences Corp

- Continues strong in federal markets
  - Primarily professional services/SI
- Resurgent interest in commercial markets
  - Health and insurance
  - Tax and credit
  - Professional services/SI

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CO-8

Notes

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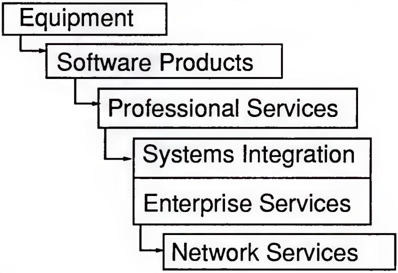
Digital Equipment



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CO-11

Notes

EDS

- Industry leader in systems operations
- Aiming for very large accounts
- Industry-oriented
  - Finance
  - Insurance
  - State and local government
  - Banking

CO-12

INPUT

Notes

1/30/92

EDS

- Systems Operations
  - Systems Integration
    - Processing Services
      - Network Mgmt.
        - Business Operations

CO-14a

INPUT

Notes

1/30/92

Opportunities and Conclusions

IS-70

Notes

New Technology Foundations

- International standards
- Graphical user interface
- Client-server
- Networking and integration

IS-63a

Notes

9/28/91

New Technology Foundations

- Distributed data
- Imaging
- Engineered/re-engineered software

IS-63b

Notes

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The Changing Buyer

- General manager becomes primary buyer
- IS becomes internal consultant
- Solutions versus technology

IS-64a

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Notes

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The Changing Buyer

- Decisions become larger—take longer
- The budget is decentralized—multiple buyers

IS-64b

Notes

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Single Message

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what it does

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IS-73

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Notes

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